<u>IN THE CLAIMS</u>:

The following is a complete listing of the claims, and replaces all earlier

version and listings.

Claims 1. - 11. (canceled).

12.   (currently amended): An image processing method which maps a

first color gamut into a second color gamut, comprising the steps of:

setting first sample points [[in]] <u>on a surface of</u> the first color gamut<u>, and</u>

<u>second sample points in the first color gamut</u>;

obtaining ~~second sample points by mapping the first sample points to the~~

~~second color gamut~~ <u>third sample points corresponding to the first sample points, and fourth</u>

<u>sample points corresponding to the second sample points, wherein the third sample points</u>

<u>and the fourth sample points are in the second color gamut</u>;

setting ~~plural gradation lines by using the plural first sample points~~ <u>surface</u>

<u>gradation lines based on the first sample points and internal gradation lines based on the</u>

<u>second sample points</u>;

mapping ~~the plural gradation lines by using the second sample points~~

~~corresponding respectively to the plural first sample points~~ <u>the surface gradation lines</u>

<u>based on the third sample points, and mapping the internal gradation lines based on the</u>

<u>fourth sample points</u>; and

mapping an input color into the second color gamut by using the mapped

surface gradation line<u>s and the mapped internal gradation lines,</u>

wherein the [[set]] <u>surface gradation lines and the internal</u> gradation lines each indicate a locus of color change in the first color gamut<u>, and the mapped surface gradation lines and the mapped internal gradation lines each indicate a locus of color change in the second color gamut</u>.

13. (currently amended): A method according to Claim 12, wherein the [[gradation line is]] <u>the surface, internal, mapped surface and mapped internal gradation lines are</u> obtained by using at least one of a B-spline curve, a rational B-spline curve, a Bézier curve, and a one- or more-dimensional spline curve.

14. (previously presented): A method according to Claim 12, wherein the first sample points are located on six faces of an R (red) face, a G (green) face, a B (blue) face, a C (cyan) face, an M (magenta) face and a Y (yellow) face in the first color gamut.

15. (currently amended): A method according to Claim 12, wherein the mapping of the <u>surface and internal gradation lines</u> <s>sample points</s> to the second color gamut includes two-dimensional mapping on a lightness-chroma plane according to the first color gamut and the second color gamut, and adjustment of a hue component.

16. (currently amended): An image processing apparatus which maps a first color gamut into a second color gamut, comprising:

a first sample point setting unit adapted to set first sample points [[in]] on a surface of the first color gamut and second sample points in the first color gamut;

an obtaining unit adapted to obtain ~~second sample points by mapping the first sample points to the second color gamut~~ third sample points corresponding to the first sample points, and fourth sample points corresponding to the second sample points, wherein the third sample points and the fourth sample points are in the second color gamut;

a gradation line setting unit adapted to set ~~plural gradation lines by using the plural first sample points~~ surface gradation lines based on the first sample points and internal gradation lines based on the second sample points;

a gradation line mapping unit adapted to map ~~the plural gradation lines by using the second sample points corresponding respectively to the plural first sample points~~ the surface gradation lines based on the third sample points, and mapping the internal gradation lines based on the fourth sample points; and

an input color mapping unit adapted to map an input color into the second color gamut by using the mapped surface gradation lines and the mapped internal gradation lines,

wherein the [[set]] surface gradation lines and the internal gradation lines each indicate a locus of color change in the first color gamut, and the mapped surface gradation lines and the mapped internal gradation lines each indicate a locus of color change in the second color gamut.

17.   (currently amended): A storage medium which computer-readably stores a program to cause a computer to execute an image processing method which maps a first color gamut into a second color gamut, said method comprising the steps of:

setting first sample points [[in]] on a surface of the first color gamut, and second sample points in the first color gamut;

obtaining ~~second sample points by mapping the first sample points to the second color gamut~~ third sample points corresponding to the first sample points, and fourth sample points corresponding to the second sample points, wherein the third sample points and the fourth sample points are in the second color gamut;

setting ~~plural gradation lines by using the plural first sample points~~ surface gradation lines based on the first sample points and internal gradation lines based on the second sample points;

mapping ~~the plural gradation lines by using the second sample points corresponding respectively to the plural first sample points~~ the surface gradation lines based on the third sample points, and mapping the internal gradation lines based on the fourth sample points; and

mapping an input color into the second color gamut by using the mapped surface gradation lines and the mapped internal gradation lines,

wherein the [[set]] surface gradation lines and the internal gradation lines each indicate a locus of color change in the first color gamut, and the mapped surface gradation lines and the mapped internal gradation lines each indicate a locus of color change in the second color gamut.

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